

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (canceled).

Claim 2 (currently amended): A sputtering target comprising:

a sintered body target structure having a diameter of 100mm or more and an ultrafine and uniform structure with an average crystallite size of 1nm to 5nm, said average crystallite size of 1nm to 5nm being uniform entirely throughout said sputtering target, and said target structure being of a state in which a grain boundary is not observable and being without any crystal growth;

said sputtering target being made of an alloy having a three or more component system containing at least one element selected from the group consisting of Zr, Pt, Pd, Fe, Co, and Cu as its primary component in an atomic ratio of 50at% or more, said alloy possessing the requirements of a metallic glass satisfying an atomic radius difference of 12% or more and negative heat of mixing; ~~and~~

said sputtering target having a relative density of at least 96.4%; and

said sintered body target structure being made of sintered gas atomized powder such that said sintered body target structure has powder grains that form said sintered body target structure.

Claim 3 (previously presented): A sputtering target according to claim 2, wherein said average crystallite size of said target structure is 1nm to 2nm.

Claims 4-13 (canceled).

Claim 14 (previously presented): A sputtering target according to claim 3, wherein said primary component of said alloy is Zr, and wherein said alloy contains at least one element selected from the group consisting of Cu, Ni and Al.

Claims 15-19 (canceled).

Claim 20 (previously presented): A sputtering target according to claim 2, wherein said primary component of said alloy is Zr, and wherein said alloy contains at least one element selected from the group consisting of Cu, Ni and Al.

Claim 21 (withdrawn): A sputtering target according to claim 2, wherein said primary component of said alloy is Pt, and wherein said alloy contains at least one element selected from a group consisting of Pd, Cu and P.

Claim 22 (withdrawn): A sputtering target according to claim 2, wherein said primary component of said alloy is Pd, and wherein said alloy contains at least one element selected from a group consisting of Cu, Ni and P.

Claim 23 (withdrawn): A sputtering target according to claim 2, wherein said primary component of said alloy is Fe, and wherein said alloy contains B and at least one element selected from a group consisting of Ti, V, Cr, Zr, Nb, Mo, Hf, Ta and W.

Claim 24 (withdrawn): A sputtering target according to claim 2, wherein said primary component of said alloy is Co, and wherein said alloy contains at least one element selected from a group consisting of Fe, Ta and B.

Claim 25 (withdrawn): A sputtering target according to claim 2, wherein said primary component of said alloy is Cu, and wherein said alloy contains at least one element selected from a group consisting of Zr and Ti.

Claims 26-36 (canceled).

Claim 37 (currently amended): A metallic glass sputtering target comprising:
a sintered body target structure having a diameter of 100mm or more and an
ultrafine and uniform structure with an average crystallite size of 1nm to
5nm, said average crystallite size of 1nm to 5nm being uniform entirely
throughout said sputtering target, and said target structure being of an
amorphous state in which a grain boundary is not observable and being
without any crystal growth;
said sputtering target being made of an alloy having a three or more component
system containing Zr as its primary component in an atomic ratio of 50at%

or more, said alloy containing at least one element selected from the group consisting of Cu, Ni and Al, and said alloy possessing the requirements of a metallic glass satisfying an atomic radius difference of 12% or more and negative heat of mixing; and
said sputtering target having a relative density of at least 96.4%; and
said sintered body target structure being made of sintered gas atomized powder
such that said sintered body target structure has powder grains that form a
constituent unit of said sintered body target structure.

Claim 38 (previously presented): A metallic glass sputtering target according to claim 37, wherein said average crystallite size uniform entirely throughout said sputtering target is 1nm to 2nm.

Claim 39 (previously presented): A metallic glass sputtering target according to claim 37, wherein said alloy consists of Zr, Cu, Ni and Al.

Claim 40 (previously presented): A metallic glass sputtering target according to claim 37, wherein said alloy of said sputtering target is $\text{Zr}_{65}\text{Cu}_{17.5}\text{Ni}_{10}\text{Al}_{7.5}$ and said target has a relative density of 99.8%.

Claim 41 (previously presented): A metallic glass sputtering target according to claim 37, wherein said three or more component system contains Zr in an atomic ratio of 65at%.

Claim 42 (previously presented): A metallic glass sputtering target according to claim 37, wherein said at least one element selected from the group consisting of Cu, Ni and Al exists in an atomic ratio of 5at% or more.

Claim 43 (previously presented): A metallic glass sputtering target according to claim 37, wherein said sintered body target structure is a structure having been sintered at a sintering temperature of between 400 and 520°C.

Claim 44 (previously presented): A metallic glass sputtering target according to claim 37, wherein said sintered body target structure has an erosion face that has a surface roughness capable of remaining between 0.12 to 0.34μm after sputtering is performed with the target structure.